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EXAMINER

HUYNH, KHOA B

ART UNIT

PAPER NUMBER

2416

MAIL DATE

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07/07/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/572,965	SAFFRE, FABRICE T. P.	
	Examiner	Art Unit	
	KHOA HUYNH	2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 May 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-5 and 7-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-5 and 7-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is in response to the Applicants' Request for Continued Examination and Amendments received on 05/26/2009.

Claim Status

2. Claims 1 and 5 are amended.
3. Claims 2, 6 are cancelled.
4. Claims 1, 3-5, and 7-10 are currently presenting for examination, with claim 1 and 5 being independent.
5. This action has been made **NON-FINAL**.

Response to Arguments

6. Applicant's arguments filed 05/26/2009 have been fully considered but they are not persuasive.
7. The following is Examiner's response to Applicants' arguments.
8. On page 5, Applicants state that "the lightest user has the highest ranking, the heaviest user has the lowest ranking, and the other users are arranged, in order, in between these extremes". On page 10, Applicants state that "the user's individual usage records are compared with each other". These features are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from

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the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Claim 1 only recites "ranking each one of the users currently requiring access according to the measured usage relative to each other".

Even though each one of the users currently requiring access are ranked, their rankings could be the same since claim 1 doesn't recites that their rankings are different from each other. Also, from claim 1, it is unclear whether the phrase "relative to each other" applies to the ranking process or the measuring process. The phrase "relative to the other" is itself very broad. Because, when a user is ranked, it is always done relative to other users, unless there are no other users. The same principle applies to measuring. Furthermore, the term "users currently requiring access" is not supported in the specification. The specification only mentions "users currently on line".

9. On page 6, Applicants state that "the lightest user gets top ranking, regardless of how much he has used". This statement contradicts what is being stated in claim 1. Claim 1 stated "ranking each one of the users currently requiring access **according to the measured usage** relative to each other".

10. Amended claim 5 uses the term "connected user" instead of the term "user currently requiring access" in claim 1. The term "connected user" is very broad since a user can be "connected" if the cable is connected.

11. On page 11, Applicants state that a restriction factor of unity means "full allocation" and "x=100%". "Full allocation" and "x=100%" are not recited in the rejected claim(s). The broadest interpretation of the term "unity" is one, not "full allocation" nor "x=100%".

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12. Most of Applicants' claims use very broad terms such as "relative", "unity", "unique". Examiner is required by law to give these terms their broadest reasonable interpretations. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Claim Objections

13. Claims 1, 5 are objected to because of the following informalities:

14. For claim 1, the terms "the maximum capacity", "the usage", "the other users", "the users currently requiring access", "the availability", "the number of users currently requiring access" are unclear since the words "the" are used in the first occurrences of those phrases. Appropriate correction is required.

15. For claim 5, the terms "the usage", "the other users", "the number of users currently connected" are unclear since the words "the" are used in the first occurrences of those phrases. Appropriate correction is required.

Claim Rejections - 35 USC § 101

16. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

17. **Claims 1, 3, 4** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Based on Supreme Court precedent

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(*Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876)) and recent Federal Circuit decisions, a § 101 process must be tied to another statutory class or transform underlying subject matter to a different state or thing. Neither of these requirements is met by claims 1, 3, 4.

18. Claims 1, 3, 4 recite multiples steps: measuring, ranking, restricting... There is no apparatus positively recited to accomplish these steps. The transformation requirement is a physical transformation. Data transformation is not considered.

Claim Rejections - 35 USC § 112

19. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

20. **Claims 1, 3-4** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

21. Claim 1 contains limitations “ranking each one of the users currently requiring access according to the measured usage relative to each other; and restricting the availability of resource to each user currently requiring access by applying a restriction

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factor to each user according to that user's ranking and the number of users currently requiring access." The original specification only discuss about users "currently on line" not "currently requiring access".

22. Claims 3 and 4 are also rejected due to their dependencies.

Claim Rejections - 35 USC § 102

23. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

24. **Claims 1, 4, 9** are rejected under 35 U.S.C. 102(b) as being anticipated by **Amalfitano, US 2001/0033557**.

25. **For independent claim 1,**

Amalfitano discloses: A method of controlling access to a communications resource (**Amalfitano, page 1, paragraph 8, lines 7-8**, "a scheme for assigning priority levels to users based upon a history of their request for access to the resources") in which the maximum capacity made available to each of a plurality of users bears an inverse relationship to the usage of the resource made by that user over a previous period, relative to the usage made by the other users (**Amalfitano, page 1, paragraph 8, lines 8-15**, the more resource a user uses, the less of their requests are granted;

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relative to the usage made by other users mean the more resources one user is granted, the less is available to the rest of the users since resource is limited), said method comprising:

*measuring the usage of the resource made by each user over a predetermined period (**Amalfitano, fig 2**, usage of each user over a month is being measured)*

*ranking each one of the users currently requiring access according to the measured usage relative to each other (**Amalfitano, page 3, paragraph 41, lines 2-3**, users are ranked relative to other users by putting their access requests in a queue organized by priority level, which is based measured usage; **Amalfitano, page 1, paragraph 8, lines 8-15**, "If a user has, over a historical period of time, made fewer demands than a stated amount, that user is given a higher priority than a user who has made greater use of the resources than their stated amount")*

*and restricting the availability of resource to each user currently requiring access by applying a restriction factor to each user according to that user's ranking and the number of users currently requiring access (**Amalfitano, fig 1, element 160**: queue. **Amalfitano, page 3, paragraph 41, lines 2-3**, users are ranked relative to other users by putting their access requests in a queue organized by priority level, which is based measured usage; **Amalfitano, paragraph 55, 57**: x and y are restriction factors which are applied to each user, x and y are based on each user's priority level and $p1$, $p2$ which are percent of current user at each level).*

26. **For claim 4,**

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Amalfitano discloses: the restriction factor allocated to the user having made the least usage over the previous period is unity (***Amalfitano, page 4, paragraph 56***, for two priority levels, restriction factor allocated to user having made the least usage is $x=1.08$, as the number of priority levels increases, x will go to 1, unity)

27. **For claim 9,**

Amalfitano discloses: each user is given a unique ranking (***Amalfitano, page 1, paragraph 11, lines 1-3***, “With the invention, the grade of service experienced by any particular user depends upon historical use, plus the continuity of resource demand”; Since the historical use and demand of each user is unique, the ranking (users are ranked by putting their requests in a queue) is also unique; Unique means distinctive).

Claim Rejections - 35 USC § 103

28. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

29. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1,148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

30. **Claims 5, 10** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Amalfitano, US 2001/0033557** in view of **Otis US 6,085,241**.

31. **For independent claim 5,**

Amalfitano discloses: apparatus (**Amalfitano, fig 1, element 145, WIF: wireless interface facility**) for controlling access to a communications resource (**Amalfitano, page 2, paragraph 32, lines 6-7, "Management and allocation of wireless channels 130 is provided by WIF 145 and corresponding resources 150"**) having means for allocating capacity to each of a plurality of users (**Amalfitano, fig 1, element 145, WIF: wireless interface facility allocates resources to users 105-A to 105-Z**) in inverse relationship to the usage of the resource made by that user over a previous period, relative to the usage made by the other users users (**Amalfitano, page 1, paragraph 8, lines 8-15, the more resource a user uses, the less of their requests are granted; relative to the usage made by other users mean the more resources one user is granted, the less is available to the rest of the users since resource is limited**), said apparatus comprising.;

... measuring the usage of the resource made by each user over a predetermined period (**Amalfitano, fig 2, usage of each user over a month is being measured;**);

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sorting means (**Amalfitano, fig 1, element 160: queue**) for ranking each one of connected users according to the measured usage relative to each other (**Amalfitano, fig 1, element 160: queue. Amalfitano, page 3, paragraph 41, lines 2-3**, users are ranked relative to other users by putting their access requests in a queue organized by priority level, which is based measured usage; **Amalfitano, page 1, paragraph 8, lines 8-15**, “If a user has, over a historical period of time, made fewer demands than a stated amount, that user is given a higher priority than a user who has made greater use of the resources than their stated amount.”);

... calculating a restriction factor for each connected user according to that user's ranking (**Amalfitano, paragraph 55, 57: x and y are restriction factors which are applied to each user, x and y are based on each user's priority level/ranking and p1, p2 which are percent of current user at each level**);

... making the resource available to each connected user to an extent determined by the restriction factor and the number of users currently connected (**Amalfitano, page 3, paragraph 41, lines 6-7**, “As requests are popped off the queue, they are assigned to resources according to priority level”; the more users currently requiring access, the less resources will be available, therefore, the resource available is determined not only by the restriction factor but also the number of users currently connected)

Amalfitano discloses all the subject matter of the claimed invention with the following exceptions: measuring means, calculating means, access control means

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Otis from the same or similar fields of endeavor discloses: means for measuring usage of resource (**Otis, column 4, lines 16-19, bandwidth manager 10**)

means for calculating a restriction factor (**Otis, column 5, lines 32-35, bandwidth limit value, which is a restriction factor, is calculated using CPU**)

access control means (**Otis, column 5, lines 38-47, data delay mechanism controls access**)

Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teachings of Otis into Amalfitano, since Amalfitano suggests a technique for controlling access, and Otis suggests the beneficial use of bandwidth manager, CPU and delay mechanism to implement such technique since "Internet access bandwidth is both a critical resource and a key cost factor for ISP's in particular. Reliable bandwidth usage auditing and monitoring is important in web hosting businesses" (**Otis, column 2, lines 9-12**) in the analogous art of data communication.

32. **For claim 10,**

Amalfitano discloses: give a unique ranking to each connected user (**Amalfitano, page 1, paragraph 11, lines 1-3, "With the invention, the grade of service experienced by any particular user depends upon historical use, plus the continuity of resource demand"; Since the historical use and demand of each user is unique, the ranking (users are ranked by putting their requests in a queue) is also unique; Unique means distinctive**).

33. **Claims 7 and 8** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Amalfitano, US 2001/0033557** and **Otis US 6,085,241** as applied to claim 5 above and further in view of **Chuah US 6,567,416**.

34. **For claim 7,**

Amalfitano and Otis disclose all the subject matter of the claimed invention with the following exceptions: associated with a modem associated with a server controlling access to the internet

Chuah from the same or similar fields of endeavor discloses: associated with a modem (**Chuah, fig 1 element 4, modem is associated with the network**)

associated with a server controlling access to the internet (**Chuah, fig 1, element 14: server is capable of controlling access to the internet 20**)

Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teachings of Chuah into Amalfitano and Otis, since Amalfitano suggests a technique for controlling access, and Chuah suggests the beneficial use of modem and server when implementing such technique since this configuration is “typically utilized today to provide remote internet access through modems to user computers” (**Chuah, column 1, lines 38-40**) in the analogous art of data communication.

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35. **For claim 8,**

Amalfitano and Otis disclose all the subject matter of the claimed invention with the following exceptions: associated with a switching system for controlling access to an internet service provider

Chuah from the same or similar fields of endeavor discloses: associated with a switching system for controlling access to an internet service provider (**Chuah, fig 1, element 6: PSTN, public switch telephone network controls access to element 10: ISP, internet service provider**)

Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teachings of Chuah into Amalfitano and Otis, since Amalfitano suggests a technique for controlling access, and Chuah suggests the beneficial use of switching system when implementing such technique since this configuration is “typically utilized today to provide remote internet access through modems to user computers” (**Chuah, column 1, lines 38-40**) in the analogous art of data communication.

Allowable Subject Matter

36. Claim 3 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 1st paragraph and U.S.C. 101 set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHOA HUYNH whose telephone number is (571) 270-7185. The examiner can normally be reached on Monday - Thursday: 7:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, SEEMA RAO can be reached on (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/K. H./
Examiner, Art Unit 2416

/Donald L Mills/
Primary Examiner, Art Unit 2416
July 6, 2009